



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/743,847

12/22/2003

Yao Ting

338224-991111

9082

26379 7590 05/30/2008

DLA PIPER US LLP

2000 UNIVERSITY AVENUE

E. PALO ALTO, CA 94303-2248

EXAMINER

LAMARRE, GUY J

ART UNIT

PAPER NUMBER

2112

MAIL DATE

DELIVERY MODE

05/30/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,847	<b>Applicant(s)</b> TING ET AL.	
	<b>Examiner</b> Guy J. Lamarre	<b>Art Unit</b> 2112	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/11/08 & 6/21/07.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 15-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/10/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### FINAL OFFICE ACTION

- \* **Claims 1-9, 15-23** are elected and remain pending. Non-elected **Claims 10-14** are withdrawn from consideration.
- \* The prior art rejections of record are maintained in response to Applicants' Amendments.

### Response to Arguments

- \* Applicants' arguments have been fully considered, but are not persuasive.

### REMARKS

**1.** In response to **Claims 1-9, 15-23**, Applicants argue, on pages 5-6 that the prior art of record does not teach the claimed invention, i.e., the specific "hardware error checking module" *as envisaged by Applicants*.

**a.** **Examiner** notes that Applicants concede that the prior art of record does disclose that "hardware error checking module" *is taught at penultimate para. of page 5*.

**b.** **Examiner** also notes that the prior art of record does not restrict the disclosed error checking protocol exclusively to non-hardware implementation as alleged by Applicants.

**Examiner also** notes that the prior art of record does not have to show/disclose intended use/purpose as alleged by Applicants.

**Examiner** further remarks that **Admitted prior art** clearly discloses, e.g., error detection of input packets at page 1 line 17, wherein error detection of packets is not a soft idea, but rather an idea implemented in hardware via registers, buffers, computer memory... Software/ or commands or control has to be implemented in hardware for real life effect.

**.1** To the extent that the response to the applicant's arguments may have mentioned new portions of the prior art references which were not used in the prior office action, this does not constitute a new ground of rejection. It is clear that the prior art reference is of record and has been considered entirely by applicant. See *In re Boyer*, 363 F.2d 455, 458 n.2, 150 USPQ 441,

444, n.2 (CCPA 1966) and *In re Bush*, 296 F.2d 491, 496, 131 USPQ 263, 267 (CCPA 1961).

The mere fact that additional portions of the same reference may have been mentioned or relied upon does not constitute new ground of rejection. *In re Meinhardt*, 392, F.2d 273, 280, 157 USPQ 270, 275 (CCPA 1968).

**Examiner** thus maintains that the Claims at bar, in their current form, are not distinguished over the prior art of record, namely **Admitted prior art** and **Fahmi et al.** (US Patent No. 6128766).

### **Claim Rejections - 35 USC § 102**

\* **Claims 1-5, 8-9, 15-22** are rejected under 35 U.S.C. 102(b) as being anticipated by **Applicants' Admitted prior art** (hereinafter **Admitted prior art**).

**As per Claims 1-5, 8-9, 15-22, Admitted prior art** discloses equivalent error detection in a data stream comprising: parsing input packets having predetermined formats (video/voice) (**claims 1, 15, 19, 21**), e.g., at page 1 line 14; error detection of said input packets (**claims 2, 20**), e.g., at page 1 line 17- and indication/marketing/flagging/tagging said input packets at error determination (**claim 3**); selecting/demultiplexing voice data from said input packets for storage), e.g., at page 1 line 12 (**claims 4, 9, 16-17**); wherein error detection is via CRC and predetermined formats comprise AC-3 data format (**claims 5, 22**), e.g., at page 1 line 16.

### **Claim Rejections - 35 USC ' 103**

\* **Claims 6-7, 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicants' Admitted prior art** (hereinafter **Admitted prior art**) and **Fahmi et al.** (US Patent No. 6128766).

**As per Claims 6-7, Admitted prior art** substantially discloses the claimed approach of error detection in a data stream. {See **Admitted prior art**, page 1 in passim, wherein apparatus and method are described.}

**Not specifically described** in detail in **Admitted prior art** is the step whereby cycle delay is effected along with polynomial division on data frame/packet bits.

**However Fahmi et al.**, in an analogous art, discloses such techniques in col. 2 line 20, col. 4 line 8(delay) and col. 1 line 17, col. 3 line 5 (polynomial division), e.g., *“In accordance with another embodiment, a system for determining an error detection code (EDC) on a bit stream comprising a payload formed of a sequence of words followed by a reserved field, is comprised of an input data CRC (EDC) calculator, an input data and reserved field CRC (IDRC) calculator, apparatus for applying input data in parallel format to inputs of the calculators, first apparatus for selecting an output of either of the calculators to a CRC output, first delaying apparatus for delaying by a word interval the output of either of the calculators prior to application of said output to the CRC output, apparatus for applying a signal from the delayed CRC output to recursive update inputs of the calculators, second apparatus for selecting either the input data or the signal from the delayed CRC output to a system output, apparatus for applying a signal to said first apparatus, for selecting an output of the EDC calculator for application to the delaying apparatus for application to the delayed CRC output during an interval of each word of the input data until the occurrence of a last input word, and for subsequently selecting an output of said IDRC calculator for application to the delaying apparatus for application to the delayed CRC output during the last input word, and apparatus for applying a signal to the second apparatus for selecting during an interval of each word of the input data, for selecting the delayed CRC output during an interval following said last input word.”* {See **Fahmi et al.**, Id., col. 4 line 1 et seq.}

**Therefore**, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the procedure in the **Admitted prior art** by including therein data delaying approach and CRC via polynomial division on data frame/packet bits as

taught by **Fahmi et al.**, because such modification would provide the procedure disclosed in **Admitted prior art** with a technique whereby “ *delays provide proper synchronization for data processing.*” {See **Fahmi et al.**, col. 4 line 26 et seq.}

**As per Claim 21, Fahmi et al.** also discloses equivalent parallel data processing in col. 4 line 45 et seq.}

**As per Claim 23, Fahmi et al.** discloses equivalent circuitry in col. 4 line 5 et seq.}

### CONCLUSION

\* **THIS ACTION IS MADE FINAL.** See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

\* Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guy J. Lamarre, P.E., whose telephone number is (571) 272-3826. The examiner can normally be reached on Monday to Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached at (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may also be obtained from the Patent

Art Unit: 2112

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000

**/Guy J Lamarre/**

Primary Examiner, Art Unit 2112

---